

# Notice of Allowability

Application No.

09/590,380

Examiner

Alexis Wachtel

Applicant(s)

HOTIER ET AL.

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amd filed 12-10-2004.
2. ☒ The allowed claim(s) is/are 1-7 and 9-34.
3. ☒ The drawings filed on 09 June 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

22

***Detailed Action***

***Allowable Subject Matter***

1. Regarding claim 1, Nelson et al teaches the claimed mat element or beam element except for a first sealing element arranged between said distributor-collector part and said upper section. Have provided the claimed sealing element would not have been obvious to one of ordinary skill. Claims 2,5-7,9,14,33 and 34 depend off claim 1 and would be allowable if rewritten to overcome any outstanding claim objections.

With respect to claim 9, Nelson et al teaches the claimed mat element or beam element except for a first sealing element arranged between said distributor-collector part and said upper section. Have provided the claimed sealing element would not have been obvious to one of ordinary skill. Claims 11 and 13 depend on claim 9 and would be allowable if rewritten to overcome any outstanding claim objections.

With regards to claims 15-20, Nelson et al is completely silent with respect to the inclusion of any rotary valve in the disclosed apparatus. As such, it would not have been obvious to one of ordinary skill to have integrated a rotary valve as claimed in claims 15-20 with apparatus disclosed by Nelson et al above and would be allowable if rewritten to overcome any outstanding claim objections.

With respect to claims 21 and 22, Nelson et al teach the use of plates (120); (Fig.6A) having several sectors radial form and each of the sectors comprises a fluid distribution chamber (130); (Fig.6B) but fails to teach that fluid distribution chambers are connected to said central mat by secondary fluid transfer lines. Since fluid percolates through catalyst material and the plates, there is no apparent need for such secondary

Art Unit: 1764

through catalyst material and the plates, there is no apparent need for such secondary fluid transfer lines. Claims 21 and 22 would be allowable if rewritten to overcome any outstanding claim objections.

With respect to claim 23, the apparatus disclosed by Nelson et al is used for hydrotreating and hydrocracking of relatively heavy petroleum hydrocarbon stocks. Nelson et al do not teach the desirability of using the apparatus for the separation of at least one aromatic isomer with eight carbon atoms into a mixture of xylenes and ethylbenzene. Claim 23 would be allowable if rewritten to overcome any outstanding claim objections.

Regarding claims 24-29, Nelson et al is completely silent with respect to the inclusion of any rotary valve in the disclosed apparatus. As such, it would not have been obvious to one of ordinary skill to have integrated a rotary valve as claimed. Claim 24-29 would be allowable if rewritten to overcome any outstanding claim objections.

Regarding claim 30, Nelson et al teaches the claimed mat element or beam element except for a first sealing element arranged between said distributor-collector part and said upper section. Have provided the claimed sealing element would not have been obvious to one of ordinary skill. Claim 31 depends on claim 30 and would be allowable if rewritten to overcome any outstanding claim objections.

Regarding claim 32, Nelson et al teach an apparatus used for hydrotreating and hydrocracking of relatively heavy petroleum hydrocarbon stocks. Nelson et al do not teach the desirability of using the apparatus for the separation of at least one aromatic

Art Unit: 1764

isomer with eight carbon atoms into a mixture of xylenes and ethylbenzene. Claim 32 would be allowable if rewritten to overcome any outstanding claim objections.

***Prior Art of Record***

2. The prior art of record and not relied upon is considered pertinent to Applicant's disclosure. In addition, the following references are cited for disclosing various aspects of Applicant's invention:

US 2369478; US 3787189; US 4960571; US 4836989; US 2461331; US 3705016;  
US 5403560; US 4221638.

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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